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## Plant Disease in Kansas

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## **HIGHLIGHTS**

The 2006 winter wheat crop appears to be in pretty good health with good stands across much of Kansas.

Diseases were present in the wheat and some may need monitoring particularly in west central and south central Kansas.

## **OUTLOOK**

Recent cold weather should stop or delay any further disease development in the winter wheat until warmer temperatures prevail.

## WHEAT

Fall is the time of year when first indications of disease problems can be assessed for the spring crop. In September (Report 7), wheat disease was reported as widespread in volunteer wheat in north central, northwest, and central Kansas. Leaf rust was the predominate disease but wheat streak mosaic was also noted in select fields.

The following are maps made of disease findings during November survey of planted fields. Survey included the north central, west central, southwest, south central and central crop reporting districts.

Not all counties within these districts were surveyed. Eastern Kansas fields were not surveyed.

Areas 🍪 of Kansas where wheat streak mosaic incidence was																
	10 per cent or greater in individual fields.  Revulis Washington W												7			
Cheyer	nne / R	awlins	Decatur Norton		Phillips	Smith	Jewell	Republic	Washingto	ashington Marshall		na BR	<u> </u>			
CN	CN		DC	NT	PL	SM	JW	RP	RP WS		NM					
Sherman SH		homas <b>TH</b>	Sheridan SD	Graham <b>GH</b>	Rooks	Osborne OB	Mitchell MC	Cloud	O Clay Riley Pott		Jackson AT atomie JA efferson Leatenworth  Shawnee JF LV WY Wyando					
Wallace	Wallace Logan		Gove	Trego	Ellis	Russell	Lincoln	Ottawa OT	ļ		baun see	-	Douglas	لري Johnson	/andotte	
WA	_ <u>  L</u>	G	GO	TR	EL	RS	Ellsworth	Saline	Dickinson (		WB	Osage	DG	JO		
	Wichita	Scott	Lane	Ness	Rush RH	Barton	EW	SA McPherson	DK	MR	Lyon	OS	Franklin FR	Miami MI		
GL	WH	SC	LE	NS	,	BT	Rice	MP	Warion	Chase	LY	Coffey	Anderson	Linn		
III amailt am		Finne	,	Hodgeman	Pawnee PN	Stafford	RC	<u> </u>	MN	cs_		Œ	AN	LN _		
Hamilton HM	Kearny KE	FI	$\vdash$	HG	Edwards	SF	Reno	Han <b>H</b> V		Gre	enwood	Voodsor	Allen	Bourbon	l	
11141	}	<u> </u>	Gray	Ford	ED		RN	Sedgv	wick Bu	.tler		WO	AL_	BB	l	
Stanton	Grant	Haskell	GY	FO	Kiowa	Pratt PR	Kingman	SG	.   в	ա ⊢	GW	Wilson	Neosho	Crawford	1	
ST	GT	HS	45	τ——	KW	- 11	KM	-	_		Elk	WL	NO	CR	4	
Morton	St ev ens	Sew and	Meade	Clark	Comanche	Barber	Harper	, Sum		wley	EK M	pntgom	Labette ery	Cherokee		
MT	SV	SW	ME	CA	CM	BA	HP	SU	(	or lu	CQ	MG	LB	CK		

Wheat streak mosaic at individual field incidences of ten per cent or greater were found in the counties of Gove (GO), Ness (NS), Wichita (WH), Hodgeman (HG), and Meade (ME). In other areas of the state, trace incidences were found in Reno (RN), Finney (FI), Ford (FO), Barton (BT), Greeley (GL), and Wallace (WA) counties. Greeley County had a major epidemic of wheat streak mosaic in 2005.

Leaf rust incidences above 10 per cent in select fields																
Che	Cheyenne R		Rawlins Decatur		Norton	Phillips	Smith	Jewell		Washingto	ton Marshall		lemaha Brown Doniphan			
	CN RA		RA	DC	NT	PL	SM	JW	RP	ws	MS				-	
Sherman		Thomas		Sheridan	Graham	Rooks	Osborne	Mitchell	Cloud	Clay	lay Pottawatomie		Jackson AT  Leafenworth			th
S	SH		ГH	SD	GH	RO	ОВ	MC	Ottava	CY RL PT		~~~a	Shawnee JF (LV WY Wyando			yandotte
1	Wallace Logan		an	Gove	Trege	Ellis	Russell	Lincoln LC	OT		Seary Wa	baun see		Douglas	لري Johnson	
W	A LG		<u> </u>	GO	TR	EL	RS	Ellsworth	Saline	Dickinson	Morris	WB	^	DG	JO	
Greele	y Wic	hita	Scott	Lane	Ness	Rush RH	Barton	EW	SA_ McPherson	DK (	MR_	Lyon	Osage OS	Franklin FR	Miami MI	
GL	W	H_	SC	LE	NS	IXI I	вт	Rice		Marion	Chase		Coffee	Anderson	Linn	
  Hamilto	n Kea	rny	Finne		Hodgeman	Pawnee PN	Stafford	RC	MP Han	MN /ey	cs	LY	Œ	AN	LN	
НМ	K		FI		HG	Edw and s	SF	Reno	H	V	Gre	enwood	Woodsor	Allen	Bourbon	
		¦		Gray	Ford	ED		RN	Sedgv	vick B	utler		wo	AL_	BB	
Stanto ST	n Gra G	- 1	Haskell <b>HS</b>	GY	FO	Kiowa KW	Pratt PR	Kingman KM	SG	F	BU	GW Elk	Wilson WL	Neosho NO	Crawford CR	
Mortor	1	- 1	Sew and	Meade	Clark	Comanche		Harper	Sum		w ley	EKN	lontgom	Labette	<b>`</b> ——	
MT s	S	V	SW	ME	CA	CM	BA	<b>P</b>	SU	'	αr ļ.,	CQ	MG	LB	CK	

Leaf rust was widespread in much of central Kansas and the eastern portion of western Kansas. Lower incidences were found in fields located in counties neighboring the highlighted counties. Pustules were found on leaves and in the crown tissue. Extreme western Kansas wheat had almost no leaf rust infection. A couple of reports of powdery mildew and speckled leaf blotch were made in southwest and south central Kansas. These observations were incidental and represent near historic lows for the two diseases. Kansas State University (J. Stack and J. Pierzynski) reported two soil borne mosaic positive diagnosis from wheat in Harper and Gove counties that were sent in to the Diagnostic Clinic. This diagnosis was very unusual as almost all reports are made in the spring although infection occurs in the fall.

Finally, oat birdcherry aphids were monitored during survey. The aphid species is generally associated with vectoring barley yellow dwarf infections in the spring but initial infections occur in the fall. Not all aphids carry the virus. The aphids were found in the crown and root system of the plant.

Barley yellow dwarf virus is perennially a problem in southeast Kansas and occasionally in other districts of the state.

Cheyer	nne R	Counties where out birdcherry aphids  Were found in several fields.  Rawlins Decatur Norte Sund in several fields.  Isnington Marshall Nemaha Brown Doniphan													
CN	_CN RA		DC	NT	PL	SM	JW	RP	WS MS NM BR DP Atchisons			ŗ			
		nomas TH	Sheridan	Graham <b>GH</b>	Rooks	Osborne OB	Mitchell M.C	Cloud	OD Clay		Jackson AT  JA efferson Leakenworth  PT JA shawnee JF LV WY Wya				
Wallace WA			Gove	Trego	Ellis	Russell	Lincoln	Ottawa OT Saline	Dickinso	Geary Wabauns		٠	Douglas DG	v — 1	randotte
	Wichita		GO Lane	L TR Ness	Rush RH	RS Barton	Ellsworth EW	SA McPherson	DK	Morris MR	Lyon	Osage OS	Franklin FR	Miami MI	
GL	WH	SC_ Finne	LE	NS Holdgeman	Pawnee	ВТ	Rice RC	MP	Marior MN	Chase	LY_	Coffey ·	Anderson	Linn	
Hamilton HM	Kearny KE	, FI		HG	PN Edwards ED	St aff ord	Reno	Han <b>H</b> V	V		reenwood			Bourbon	ı
Stanton	Grant GT	Haskell HS	Gray GY	FO	Kiowa KW	Pratt PR	Kingman	Sedge	vick	BU	GW Elk			BB Crawford CR	
Morton MT	Stevens SV	Τ	Meade ME	Clark CA	Comanche	Barber BA	Harper HP	Summ		OL Cowley	EK_N hautauqu CO		Labette ery LB	1	